

SAFETY DATA SHEET

EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)



1. IDENTIFICATION

PRODUCT NAME: Prolivo™ 300 SC Fungicide

DESCRIPTION: A liquid fungicide.

EPA Reg. No.: registration pending

COMPANY IDENTIFICATION:

Summit Agro USA, LLC

240 Leigh Farm Road, Suite 215

Durham, NC 27707

2. HAZARD IDENTIFICATION



WARNING

May cause damage to blood, liver and/or kidney through prolonged or repeated exposure



Toxic to aquatic life with long lasting effects

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Common Name</u>	<u>Chemical Name</u>	<u>CAS #</u>	<u>Composition</u>
Pyriofenone	(5-chloro-2-methoxy-4-methyl-3-pyridinyl)(2,3,4-trimethoxy-6-methylphenyl)methanone	688046-61-9	27.3%

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

5. FIREFIGHTING MEASURES

Flash Point: N/A

Flammable Limits (LFL-UFL): N/A

Fire and Explosion Hazards: May decompose under fire conditions emitting gasses and vapors such as hydrogen chloride, hydrofluoric acid, nitrous vapors, carbon monoxide and carbon dioxide which may be toxic and irritating to the respiratory tract.

Means of Extinction: SMALL FIRE: water spray, dry chemical, foam, or CO₂
LARGE FIRE: water spray, fog, or foam. DO NOT use water jet.

Fire Fighting Instructions: Evacuate area and fight fire upwind a safe distance to avoid hazardous vapors and decomposition products. Dike and collect water used to fight fire to prevent environmental damage due to runoff.

Firefighting Equipment: Self-contained breathing apparatus with full firefighting turn-out gear.

Hazardous Combustion Products: hydrogen chloride, hydrofluoric acid, nitrous vapors, and oxides of carbon

NFPA Ratings: Health – 2 / Flammability – 1 / Reactivity – 0

6. ACCIDENTAL RELEASE MEASURES

Precautionary Measures: Use protective equipment and engineering controls identified in Section 8 of this document.

Containment and Clean-up: Contain spill. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Wash spillage area with water. Do not allow wash water to enter drains or surface waters.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Storage: Store in original container, in a secure, dry and cool place separate from other pesticides, fertilizer, food, and feed. Avoid cross-contamination with other pesticides.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Ensure that eyewash stations and safety showers are near work areas.

Protective Clothing: Long-sleeved shirt and long pants, socks, shoes, and chemical resistant gloves made of any waterproof material.

General: Follow manufacturer's instructions for cleaning/maintaining PPE. If not such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Always follow the label instructions when handling and using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Viscous beige liquid

pH: 6 (1% suspension in water)

Boiling Point: 99°C (210°F)

Density: 1.08 – 1.12 g/mL @ 20°C

Solubility: Dispersible in water

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Extreme temperatures.

CHEMICAL STABILITY: This product is stable at normal temperatures and was found to be stable under accelerated aging conditions over 14 days at 54°C.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, hydrofluoric acid, nitrous vapors, carbon monoxide and carbon dioxide.

INCOMPATIBILITY WITH OTHER MATERIALS: Strong oxidizing agents, strong acids or bases

POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY: Oral LD₅₀ (rat): >2,000 mg/kg

ACUTE DERMAL TOXICITY: Dermal LD₅₀ (rabbit): > 2,000 mg/kg

ACUTE INHALATION TOXICITY: Inhalation LC₅₀ (rat): > 2.78 mg/L [actual airborne concentration];
> 75.35 mg/L (nominal) 4 hour

EYE IRRITANT: Practically non-irritating (mean Draize score < 0.3 for redness over 72 hours)

SKIN IRRITATION: Non-irritating (primary dermal irritation index = 0.0)

SENSITIZATION: Not a contact sensitizer

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

CARCINOGENICITY:

ACGIH: Not listed

IARC: Not listed

NTP: Not listed

OSHA: Not listed

MUTAGENIC DATA: No evidence of mutagenic effects during *in vivo* and *in vitro* assays.

ADDITIONAL DATA: Not known to cause reproductive or birth defects at normal exposure levels.

90-day feeding studies have shown increased liver weight in male rats and increased blood platelet counts in female rats ingesting 1000 ppm (60.5-69.0 mg/kg bw/day). 2-year studies have shown effects of liver, kidney, lymph nodes and skin at doses of 5000 ppm to male rats and 1000 ppm to female rats.

12. ECOLOGICAL INFORMATION

Toxic to aquatic life with long lasting effects. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with local or regional permits.

Pyriofenone has medium to high persistence in aerobic soil (DT₅₀ 54 – 201 days) with faster degradation under anaerobic conditions (DT₅₀ 31 - 43 days). It does not show hydrolytic degradation at pH of 4 – 9. Pyriofenone is not considered readily biodegradable. No evidence for bioaccumulation (bioconcentration factor = 160). Pyriofenone exhibits low to slight mobility in soil (K_{foc} = 705 – 2720 mL/g; K_{foc} arithmetic mean = 1485 mL/g)

The following is for the active ingredient, Isofetamid:

AQUATIC TOXICITY

Fish (Rainbow Trout) (96-hr LC₅₀): 13.7mg/L

Daphnia (48-hr EC₅₀): 31.4 mg/L

Algae (96-hr E_rC₅₀): 2.78 mg/L

OTHER TOXICITY

Bobwhite Quail (LD₅₀): > 2,000 mg/kg

Mallard Duck and Bobwhite Quail (8-day LD₅₀): > 5,000 ppm

13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by disposal.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA regional office for guidance.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill empty container. Refer to the product label for specific instructions.

14. TRANSPORT INFORMATION

US DOT:

Containers < 119 Gallons (450 Liters) shipped by land:

Not regulated by DOT.

Containers ≥ 119 Gallons (450 Liters) or if shipped by air (IATA) or vessel (IMDG):

DOT Shipping Name:	UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (contains Pyriofenone), 9, PG III
DOT Emergency Response Guide:	171
Marine Pollutant:	No

15. REGULATORY INFORMATION

FIFRA –

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

See inside label booklet for additional Precautionary Statements and Directions for Use including Storage and Disposal Instructions.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate waters when disposing of equipment washwater or rinsate.

15. REGULATORY INFORMATION (CONT.)

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide.

SARA Title III – Section 302 Extremely Hazardous Substances

Not Listed

SARA Title III – Section 311/312 Hazard Categories

Immediate, Delayed

SARA Title III – Section 313 Reportable Ingredients

Not Listed

CERCLA –

Not Listed

CALIFORNIA PROP 65 STATUS –

This product does not contain any chemicals known to the state of California to cause cancer or reproductive harm.

CANADA –

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

16. OTHER INFORMATION

REFER TO THE PRODUCT LABEL FOR TERMS AND CONDITIONS OF USE

Warranty Disclaimer

To the extent consistent with applicable law, all such risks shall be assumed by the buyer. Summit Agro USA LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use, subject to the inherent risks referred to above. SUMMIT AGRO USA LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, SUMMIT AGRO USA LLC AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

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Prolivo is a trademark of Ishihara Sangyo Kaisah, Ltd.

SDS Version: 1.1

Effective Date: 03/29/2017